UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION RENTON, WASHINGTON 98055-4056

In the matter of the petition of

Dassault Falcon Jet Corporation

for an exemption from § 25.813(e), of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2001-9619

GRANT OF EXEMPTION

By letter dated May 2, 2001, Mr. James H. Aldrich, Vice President, Engineering, Dassault Falcon Jet Corporation, Adams Field PO Box 967, Little Rock, Arkansas 72203-0967, petitioned for an exemption from the requirements of § 25.813(e) of Title 14, Code of Federal Regulations (14 CFR). The petitioner has requested the exemption in order to permit the installation of interior doors between passenger compartments on the Dassault Falcon Jet airplane models Mystere Falcon 900 and Falcon 900EX.

The petitioner requests relief from the following regulation:

Section 25.813(e) prohibits the installation of doors between passenger compartments.

The petitioner's supportive information is as follows:

"I. EXTENT OF RELIEF AND REASON

"The purpose of this Petition is to request an exemption from FAR §25.813(e) so as to permit the installation of doors in partitions between passenger compartments in Mystere Falcon 900 and Falcon 900EX aircraft which are registered in the USA and used for

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private/corporate transport. In support of this request, Dassault Falcon Jet Corp. is proposing alternative design requirements to provide an equivalent level of safety appropriate to the operation of such aircraft which are equipped with cabin partitions with doors.

"Both the Mystere Falcon 900 and the Falcon 900EX have the same size and layout for the passenger cabin and have the same type interior. The Falcon 900EX is a derivative of the Mystere Falcon 900.

"The Mystere Falcon 900 and Falcon 900EX are designed to meet the requirements of FAR 25, for Transport Category aircraft. These rules were primarily written to cover Transport Category airplanes that are used for the carriage of fare paying passengers from the general public, utilizing aircraft with a large passenger seating capacity up to 500. The Mystere Falcon 900 and Falcon 900EX, on the other hand, are Type Certified for a maximum of 19 passengers, and are outfitted exclusively for private/corporate use. The differences between the commercial Transport Category aircraft used in airline operation and that specifically used for corporate operations, whether private, or non-scheduled commercial, are not segregated in FAR 25. Dassault Falcon Jet contends that airplanes specifically designed for corporate service, whether private or charter, should be eligible by exemption from certain cabin features and facilities which do not comply with the full requirements of FAR 25, provided an equivalent level of safety is provided and can be demonstrated. We believe that the corporate fleet utilizing aircraft certified as Transport Category aircraft, world wide, has now grown to a point where certification agencies should consider new revised rules designed specifically for aircraft involved in this type of operation. Aircraft specifically designed and outfitted for private/corporate operation generally carry passengers who are very familiar with the specific aircraft in which they travel. Also, unlike an airliner, the crew of a corporate aircraft have day to day contact with their private/corporate passengers, thus simplifying and reinforcing communication about safety concerns. Add to this, the fact that these aircraft are generally operated continuously by a limited number of crewmembers who are intimately familiar with the specific aircraft involved, further enhances the safety environment. Therefore, the combination of these factors provide a level of safety which is not easily achieved in commercial carrier aircraft. Because of this, it is our contention that commercial carriers require a more complete set of regulatory safety features to achieve the same result. As outlined in this Petition, we have incorporated mechanical features in our cabin door design which will enhance the safety of the Falcon 900/900EX aircraft equipped with a partition and door dividing the passenger seating area.

"II. <u>DESCRIPTION OF THE PARTITION AND DOOR</u>

"1. The cabin of the Mystere Falcon 900 and Falcon 900EX is approximately 7 feet wide. Thus, it is necessary to divide the cabin full width laterally, to produce a private area, because a side corridor is impractical. The doors to be installed would be sliding pocket doors retracting into the partition on one side of the aircraft. The doors will

require a retracting footer because with a cabin head-room of 6 ft the door must slide downward tangential to the fuselage contour. The door would be frangible to enable it to be broken open in an emergency, in addition to having blow-out capability for decompression. An engineering drawing depicting the partition and door is attached to this Petition.

- "2. Only one partition of the passenger seating area with a door installed would be permitted. This will allow one section of the passenger seating area to be used as a private office or bedroom during long duration flights. The proposed door would have a placard, requiring it to be open for take-off and landing. Any other partitions of the passenger area would be closed out with a curtain.
- "3. The door would also be equipped with double means of locking the door in the open position, such that the probability of unlocking due to distortion of the fuselage in an emergency landing would be minimized. Either means will be capable of supporting the inertia loads specified in FAR §25.561.
- "4. Furthermore, lighted signs will be installed on the forward and aft face of the partition stating that the door must be open for takeoff and landing. An annunciator light will be installed in the cockpit. The lighted signs and annunciator will be controlled by the cockpit "No Smoking" switch and will be on whenever the "No Smoking" signs are on and the door is closed. The signs and annunciator will remain illuminated until the door is secured in the open position at which time it will extinguish.
- "5. The emergency exit sign requirements will be addressed separately to ensure that the level of passenger guidance required to find an exit will be provided. This will be customized on each aircraft since there are often differences between the individual aircraft interior arrangements.
- "6. The Passenger Information Card will contain a section describing the action of the door, the emergency features it includes, and instructions for latching the door open for take-off and landing.

"III. REASONS WHY GRANTING THE EXEMPTION WILL NOT ADVERSELY AFFECT SAFETY

"The effect of the safety features described above will ensure that there is always a clear path through the partition to an emergency exit. However even if some extreme condition should result in the door being closed or partially closed after an accident there are still simple, failsafe means to get through the door to reach an exit. The frangibility feature will be tested using a 5th percentile female, and the resulting aperture demonstrated to be large enough to allow for a 95th percentile male to escape.

"Because the basic issues concerning a passenger finding and reaching an exit in an emergency are addressed by the above features as well as the previously described safety parameters inherent in corporate operation, it is our position that the exemption as requested would provide a level of safety for the passengers in a Mystere Falcon 900 or Falcon 900EX which is equal to that required for commercial carrier aircraft.

"IV. PUBLIC INTEREST

"As noted above, DFJ firmly believes that the design of the Falcon 900/900EX combination latchable sliding door and cabin partition meets or exceeds the level of safety required by FAR §25.813 (e) in that it permits absolute access to all of the aircraft's normal and emergency exits by all passengers. It is DFJ's opinion and belief that the restriction contained in FAR §25.813 (e) was primarily aimed at the large commercial transport category aircraft used in Part 121 operations. Unlike those larger aircraft, all Falcon 900/900EX passengers are only steps away from the nearest emergency exit thus permitting ready access should the need for emergency evacuation arise

"Also, it is DFJ's firm belief that the installation of the combination latchable sliding door and cabin partition is in the public's best interest. It will permit the conduct of important business meetings which because of their sensitivity, require an atmosphere of complete privacy. It is a well-established fact that an enormous amount of commercial activity occurs on board the United States general aviation fleet. Such commercial activity, including private business meetings where important commercial decisions are made, are vital to maintaining the competitiveness and overall strength of the U.S. economy. For these reasons, we believe the exemption requested is clearly warranted. In addition, sick or infirmed passengers can be more comfortably transported with the divided cabin configuration.

"V. MEETING COMPETITION

"It is DFJ's understanding that Bombardier's Global Express has previously received an exemption for their corporate aircraft (BD700-1A10 REF. Docket 29819, see attachment). DFJ's Falcon 900/900EX aircraft is a direct competitor with Bombardier's Global Express. Denial of DFJ's Petition For Exemption to FAR §25.813 (e) as set forth in this petition, would place DFJ in a distinct disadvantage in the competitive general aviation marketplace for executive aircraft sales. Such a turn of events would not only be unfair but would have a detrimental effect on the welfare of our workforce (almost 2000 strong) in Little Rock, Arkansas, and Teterboro, New Jersey, and the hundreds of vendors across the country who supply parts and labor in connection with the sales of our aircraft.

A summary of the petition was published in the <u>Federal Register</u> on June 19, 2001 (66 FR 32975). No comments were received.

The FAA's analysis/summary is as follows:

As noted by the petitioner, there are differences between commercial and private use operation (whether by an individual or a corporation) of transport category airplanes that warrant consideration of the appropriate level of safety. The FAA is giving great attention to the issues raised when these airplanes are operated in private use. In recognizing the differences between commercial and private use operations, the FAA has identified several regulatory requirements, including the subject of this petition, that may need to be revised to address the safety issues revealed by these differences. The FAA is currently reviewing the adequacy of the current regulations and in the future may propose revisions to the requirements, where appropriate.

The current regulations allow the installation of interior doors, provided that passengers cannot be seated on both sides of the door during takeoff and landing. The FAA has safety concerns regarding doors that are located between passengers and exits. The FAA has proposed to prohibit such installations in future designs, as detailed in Notice of Proposed Rulemaking 96-9 (61 FR 38551, July 24, 1996). However, until the regulations are revised, such doors may continue to be installed without the need to process a petition for exemption. Additionally, the FAA has recently issued exemptions for private use airplanes that would permit installation of doors between passenger compartments, provided that certain limitations are met. The petitioner has proposed most of these limitations as part of this petition.

As noted in previous dispositions of similar petitions, the FAA does not agree that all interior doors are equivalent, and has made a specific distinction between:

- doors whose failure affects only the occupants of a room, and
- doors whose failure affects other occupants as well.

This issue is significant to the segment of the public operating these airplanes in private use. These operators prefer to have the flexibility to partition the airplane in any manner as they consider necessary for their particular objective or enterprise. The FAA acknowledges the operators' point of view, but maintains that, even with the limitations proposed, an equivalent level of safety cannot be provided when doors span the main cabin aisle. Even the petitioner essentially acknowledges that the level of safety may not be the same, but states that the planned arrangement of doors is appropriate for the type of operation involved, and is similar to that of commercial operation. In recognition of the apparent conflict, the FAA is pursuing separate rulemaking directed at private use airplanes that will be used to reconcile these regulatory issues.

With respect to the Dassault Falcon Jet airplane models Mystere Falcon 900 and Falcon 900EX that are the subject of this petition, there is the potential for some occupants to be seated aft of the two emergency exits in the airplane and some occupants to be seated

forward of an interior door. In this case (that is, with an interior door installed aft of overwing exit), it is not clear whether the door would be under the control of the occupants seated forward or aft of it. Therefore, the FAA considers that an additional limitation is necessary to address this case, so that when a door is installed aft of overwing exit, persons seated aft of it can enter the compartment forward of it, even if the door has been latched/locked from the forward side. Specifically, if there is a latch/lock installed on the forward side of the door to latch/lock the door in the closed position, there must be means to manually override a forward-side latch/lock from the aft side of the door. This is similar to the situation where a lavatory door can be unlocked from the outside by crewmembers without special tools.

While the FAA is not aware of any <u>specific</u> incidents of economic harm as a result of different standards being applied to different private use airplanes, the FAA recognizes that significant upgrading of the occupant safety standards in recent years has made this a distinct possibility. Further, as more airplanes are used in executive operations, differences in certification bases will become more significant in terms of the burden of compliance. This issue is generally not a factor for commercial operation, because the operating rules are typically upgraded along with the type design standards, making the requirements effectively the same for all manufacturers. For privately-operated airplanes, however, this is not the case. Thus, while a grant of exemption is clearly in the interest of the segment of the public for which it is requested, the FAA agrees that the public at large has the potential to benefit by granting increased flexibility to the manufacture and modification of the Dassault Falcon Jet airplane models Mystere Falcon 900 and Falcon 900EX.

Nevertheless, there exists the possibility that persons will be carried as passengers on these airplanes who, by virtue of their employment or some other relationship to the airplane's owner, may be compelled to fly. These persons will not be aware of the specific grants of exemption, and might assume that these airplanes are effectively equivalent to commercially operated airplanes. For this reason, the FAA considers it necessary for each passenger to be made aware that the particular airplane does not comply with all of the occupant safety standards mandated for the airplane type in general. The FAA will allow each operator to determine how best to accomplish this notification, but will require that procedures be developed to ensure that each passenger is so informed prior to flying on the airplane for the first time. The notification to any individual need only be accomplished once. This limitation is in addition to those proposed by the petitioner.

The approach to flight deck annunciation proposed by the applicant is generally acceptable however, the applicant has not defined the color of the indication light. The FAA considers that an amber light is appropriate.

While this grant of exemption cannot be said to provide the same level of safety that would be afforded were there strict compliance with the regulations, the resultant level of

safety is consistent with other private use airplanes. In addition, the level of safety that results from this exemption is specifically requested and desired by that segment of the public, namely the owners, that will fly on these airplanes.

After considerable deliberation, the FAA has concluded that the installation of interior doors, with certain limitations, can be accepted. In order to maximize the level of safety, the FAA will require that certain limitations, including some as proposed by the petitioner, be made mandatory to permit such installations. As noted previously, there are precedents for this decision involving other private use airplanes.

Finally, regarding the type of operation permitted under the terms of this exemption, the FAA notes that the petitioner refers to "non-scheduled" commercial operation. It should be noted that, whether or not operations are scheduled, this exemption does not permit fares to be collected in exchange for transportation. It is also the intent of this exemption that the airplane is not used to transport the general public (common carriage) even if fares are not collected. This exemption does not restrict one party from collecting fees from another party, as long as the airplane is operated for private use. That is, the airplane's owner may lease the airplane to another party, who in turn operates the airplane.

In consideration of the foregoing, I find that a grant of exemption is in the pubic interest and will not adversely affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, the petition of Dassault Falcon Jet for an exemption from the requirements of 14 CFR § 25.813(e), to allow installation of interior doors between passenger compartments, on the Dassault Falcon Jet airplane models Mystere Falcon 900 and Falcon 900EX, is hereby granted, with the following provisions:

- 1. The airplane is not operated for hire or offered for common carriage. This provision does not preclude the operator from receiving remuneration to the extent consistent with 14 CFR part 125 and 14 CFR part 91, subpart F, as applicable.
 - 2. Each door between passenger compartments must be frangible.
- 3. Each door between passenger compartments must have a means to signal to the flight crew when the door is closed. Appropriate procedures/limitations must be established to ensure that takeoff and landing is prohibited when such compartments are occupied and the door is closed.
- 4. Each door between passenger compartments must have dual means to retain it in the open position, each of which must be capable of reacting the inertia loads specified in 14 CFR § 25.561.

- 5. When doors are installed in transverse partitions, they must translate laterally to open and close.
- 6. When doors are installed in specified egress paths, each passenger must be informed that the airplane does not comply with the occupant safety requirements mandated for the airplane type in general. This notification is only required the first time that a person is a passenger on the airplane.
- 7. When doors are installed aft of the overwing exit, it must be possible for persons aft of the door to unlock or unlatch the door, without the use of tools. When doors are installed forward of the ovewing exit, it must be possible for persons forward or aft of the door to unlock or unlatch the door, without the use of tools.

Issued in Renton, Washington, on August 10, 2001

/s/

Vi L. Lipski Manager, Transport Airplane Directorate Aircraft Certification Service, ANM-100